

**REMARKS**

This Amendment is filed in response to the Office Action mailed April 21, 2005.

All objections and rejections are respectfully traversed.

Claims 1-50 are in the case.

Claims 21-50 were added to better claim the invention.

No claims have been amended.

**Claim Rejections – 35 U.S.C § 103**

At paragraph 2 of the Office Action, claims 1, 5, 7, 10, 14, and 16 were rejected under 35 U.S.C 103(a) as being unpatentable over Li et al. U.S. Patent No. 6,631,420 issued on October 7, 2003 (hereinafter Li), in view of Akhtar U.S. Patent No. 6,418,139 issued on July 9, 2002 (hereinafter Akhtar).

The present invention, as set out in representative claim 1, comprises in part:

1. A method for restoring adjacencies between a router and its neighbors during reload of routing software on the router, the method comprising the steps of:

*placing an interface of the router in a predetermined state that enables the router to receive incoming Hello packets* from its neighbors over a computer network;

*creating a unicast Hello packet in response to receiving an incoming Hello packet* from each neighbor; and

*sending the unicast Hello packet to each neighbor from whom it has received an incoming Hello packet to thereby prevent the neighbor from dropping its adjacency with the router.*

Li discloses a method for a router to reboot, and after reboot to re-establish adjacencies lost during reboot. See col. 10, lines 17-24. After a router reboots, it immediately sends a Hello message with a new Generation Identifier value in the option field for neighbors to detect its reboot. See col. 3, lines 55-61 and col. 9, lines 46-54. The neighbor then sends a unicast Hello message to the rebooting router to re-establish lost adjacencies. See col. 10, lines 17-24.

Akhtar discloses utilizing the Hello protocol for a router to detect its neighbors and form adjacencies with some of its neighbors. See col. 6, lines 36-55. The router maintains a link state database table of its local state including usable interfaces and adjacencies with neighbors. See col. 6, lines 57-62. The router periodically sends a link state advertisement distributing its local state and adjacencies to allow neighboring routers to synchronize their link state database accordingly.

The Applicant respectfully urges that both Li and Akhtar are silent concerning the Applicant's claimed invention of

*placing an interface of the router in a predetermined state that enables the router to receive incoming Hello packets . . . creating a unicast Hello packet in response to receiving an incoming Hello packet . . . sending the unicast Hello packet to each neighbor from whom it has received an incoming Hello packet to thereby prevent the neighbor from dropping its adjacency with the router.*

While Li and Akhtar disclose the routing protocol software on the router sending Hello messages to re-establish adjacencies with neighboring routers, Applicant novelly

claims the interface of the router sending Hello messages to neighboring routers. Li discloses the routing protocol sending a Hello message for a neighbor to re-establish lost adjacencies with neighbors after a reboot. Akhtar discloses the routing protocol sending Hello message to detect neighbors and form adjacencies with neighbors when a router starts. Neither Li nor Akhtar disclose the interface of the router sending Hello messages while the router reloads its routing protocol software *to thereby prevent the neighbor from dropping its adjacency with the router*. The Applicant describes the advantage of maintaining adjacencies with its neighbor routers at page 5, lines 4-9 of the specification, stating:

A goal of a NSF-capable router is to continue forwarding traffic during re-start/reload of control plane software, such as the OSPF routing protocol software, so that the reload is transparent to the router's neighbors. Accordingly, the present invention provides a backward-compatible technique that allows the router to identify its neighbors after reload of routing protocol software to thereby maintain its adjacencies with its neighboring routers.

Accordingly, the Applicant respectfully urge that Li and Akhtar, taken either singly or in combination, are legally insufficient to make obvious the presently claimed invention under 35 U.S.C. § 103 because of the absence of the Applicant's claimed novel

*placing an interface of the router in a predetermined state that enables the router to receive incoming Hello packets . . . creating a unicast Hello packet in response to receiving an incoming Hello packet . . . sending the unicast Hello packet to each neighbor from whom it has received an incoming Hello packet to thereby prevent the neighbor from dropping its adjacency with the router.*

At Paragraph 3 of the Office Action, claims 2-4, 6, 8, 9, 11-13, 15, and 17-20 were indicated to be allowable if written in independent form. In light of the Examiner's comments, the Applicant has added claims 21-36 to write the claims in independent form as indicated in the table below:

<u>Claim</u>	<u>Written To Put Claim Into Independent Form</u>
2	21
3	22
4	23
6	24
8	29
9	32
11	25
12	26
13	27
15	28
17	33
18	34
19	35
20	36

In the event that the Examiner deems personal contact desirable in disposition of this case, the Examiner is encouraged to call the undersigned attorney at: (617) 951-3028.

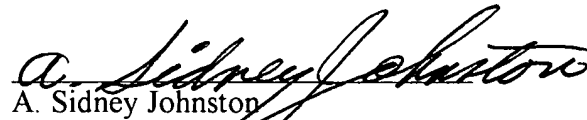
All independent claims are believed to be in condition for allowance.

All dependent claims are believed to be dependent from allowable independent claims, and therefore in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

A handwritten signature in cursive script, reading "A. Sidney Johnston". The signature is written in black ink and is positioned above the printed name and address.

A. Sidney Johnston  
Reg. No. 29,548  
CESARI AND MCKENNA, LLP  
88 Black Falcon Avenue  
Boston, MA 02210-2414  
(617) 951-2500